

DEPARTMENT OF ~~ENERGY, LABOR & ECONOMIC GROWTH~~ **LICENSING AND  
REGULATORY AFFAIRS**

**STATE FIRE SAFETY BOARD**

**HEALTH CARE FACILITIES FIRE SAFETY**

Filed with the Secretary of State on

These rules become effective immediately upon filing with the Secretary of State unless adopted under section 33, 44, or 45a(6) of 1969 PA 306. Rules adopted under these sections become effective 7 days after filing with the Secretary of State.

(By authority conferred on the bureau of fire services by section 3c of 1941 PA 207, MCL 29.3c, and Executive Reorganization Order No. 2008-4, MCL 445.2025)

R 29.1801, R 29.1802, R 29.1803, R 29.1808, R 29.1821, R 29.1822, R 29.1823, R 29.1824, R 29.1832, R 29.1841, R 29.1842, R 29.1851, R 29.1861, and R 29.1871 of the Michigan Administrative Code are amended as follows:

**PART 1. GENERAL PROVISIONS**

R 29.1801 Applicability.

Rule 1. (1) These rules apply to all of the following new and existing health care and mental health care facilities:

- (a) Freestanding surgical outpatient facilities.
- (b) Hospitals.
- (c) Nursing homes.
- (d) Homes for the aged.
- (e) Psychiatric hospitals and psychiatric units.
- (f) Hospice ~~facilities~~ **residences**.

(2) County medical care facilities are considered nursing homes for the purpose of these rules.

R 29.1802 Life safety code; adoption by reference; access to ~~Michigan state~~ **Michigan state** rules as referenced.

Rule 2. (1) The provisions of chapters 1 to 10, 11, 18, 19, 20, 21, ~~22, 23~~, 38, 39, and 43 of the national fire protection association (NFPA) standard no. 101, ~~2006~~ **2012** edition, entitled "Life Safety Code," referred to in these rules as "code," are adopted by reference as part of these rules.

(2) Copies of the adopted provisions in subrules (1) and (3) of this rule are available for inspection and distribution from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101, telephone number 1-800-344-3555 or as otherwise specified in subrule (3) of these rules. The cost of the adopted provisions of the "Life Safety Code" as of the time of adoption of these rules is ~~\$75.00~~ **93.00**. The cost of the adopted provisions in subrule (3) of this rule are specified in subrule (3) of this rule. Copies of adopted standards are available for inspection at the offices of the Michigan Department of ~~Energy, Labor And Economic Growth~~ **Licensing and Regulatory Affairs**, Bureau of Fire Services, ~~300 Washington Square~~ **3101 Technology Blvd, Ste. H**, Lansing, Michigan ~~48933~~ **48910**, or with

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other state agencies as specified in this rule. Copies of the adopted provisions may be purchased from the bureau of fire services at cost from any national source identified in chapter 2 of the code as amended in subrules (1) and (3) of this rule plus \$30.00 for shipping and handling as of the time of the adoption of these rules.

(3) Chapter 2 of the code is amended to read as follows:

## 2.1 General.

The documents or portions thereof listed in this chapter are referenced within this code and shall be considered part of the requirements of this document. The cost of each standard at the time of the adoption of these rules is indicated after the title.

## 2.2 NFPA Publications. [www.nfpa.org](http://www.nfpa.org)

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

~~NFPA 1, Uniform Fire Code™, 2006 edition. \$72.00/each~~

NFPA 10, Standard for Portable Fire Extinguishers, ~~2002~~ **2010** edition. ~~\$38.00~~ **44.50/each**

NFPA 11, Standard for Low-, Medium-, and High-Expansion Foam, ~~2005~~ **2010** edition. ~~\$38.00~~ **44.50/each**

NFPA 12, Standard on Carbon Dioxide Extinguishing Systems, ~~2005~~ **2011** edition. ~~\$38.00~~ **44.50/each**

NFPA 12A, Standard on Halon 1301 Fire Extinguishing Systems, ~~2004~~ **2009** edition. ~~\$38.00~~ **44.50/each**

NFPA 13, Standard for the Installation of Sprinkler Systems, ~~2002~~ **2010** edition. ~~\$72.00~~ **85.50/each**

NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, ~~2002~~ **2010** edition. ~~\$34.50~~ **44.50/each**

NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height, ~~2002~~ **2010** edition. ~~\$34.50~~ **40.50/each**

NFPA 14, Standard for the Installation of Standpipe and Hose Systems, ~~2003~~ **2010** edition. ~~\$34.50~~ **40.50/each**

NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection, ~~2004~~ **2012** edition. ~~\$38.00~~ **44.50/each**

NFPA 16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems, ~~2003~~ **2011** edition. ~~\$34.50~~ **40.50/each**

NFPA 17, Standard for Dry Chemical Extinguishing Systems, ~~2002~~ **2009** edition. ~~\$34.50~~ **40.50/each**

NFPA 17A, Standard for Wet Chemical Extinguishing Systems, ~~2002~~ **2009** edition. ~~\$29.00~~ **35.00/each**

NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, ~~2002~~ **2011** edition. ~~\$44.00~~ **52.50/each**

**NFPA 30, Flammable and Combustible Liquids Code, 2012 edition. References to this standard mean R 29.5401 to R 29.5419, promulgated by the Michigan department of licensing and regulatory affairs, bureau of fire services.**

NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, ~~2002~~ **2011** edition. ~~\$38.00~~ **44.50/each**

NFPA 31, Standard for the Installation of Oil-Burning Equipment, ~~2004~~ **2011** edition. ~~References to this standard mean the Michigan administrative rules R 29.5401 to R 29.5419, promulgated by the Michigan department of environmental quality.~~ **\$44.50/each**

NFPA 40, Standard for the Storage and Handling of Cellulose Nitrate Film, ~~2004~~ **2011** edition.  
~~\$29.00~~ **35.00**/each

NFPA 45, Standard on Fire Protection for Laboratories Using Chemicals, ~~2004~~ **2011** edition.  
~~\$38.00~~ **40.50**/each

NFPA 54, National Fuel Gas Code, ~~2006~~ **2012** edition. \$~~44.00~~ **52.50**/each

NFPA 58, Liquefied Petroleum Gas Code, ~~2004~~ **2011** edition. References to this code mean the Michigan administrative rules relating to storage and handling of liquefied petroleum gases, R 29.6001 to R 29.6097, promulgated by the Michigan department of ~~environmental quality~~  
**licensing and regulatory affairs, bureau of fire services.**

NFPA 70, National Electrical Code®, ~~2005~~ **2011** edition. References to this code mean the Michigan electrical code, R 408.30801 to 408.30873, promulgated by the Michigan department of energy, labor and economic growth, bureau of construction codes.

NFPA 72®, national fire alarm code®, ~~2002~~ **2010** edition. \$~~54.00~~ **85.50**/each

NFPA 80, standard for fire doors and fire windows, ~~1999~~ **2010** edition. \$~~38.00~~ **44.50**/each

NFPA 82, standard on incinerators and waste and Linen Handling Systems and Equipment, ~~2004~~ **2009** edition. \$~~34.50~~ **40.50**/each

NFPA 88A, Standard for Parking Structures, ~~2002~~ **2011** edition. \$~~29.00~~ **35.00**/each

NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, ~~2002~~ **2012** edition. \$~~34.50~~ **40.50**/each

NFPA 90B, Standard for the Installation of Warm Air Heating and Air-Conditioning Systems, ~~2006~~ **2012** edition. \$~~29.00~~ **35.00**/each

NFPA 91, Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids, ~~2004~~ **2010** edition. \$~~29.00~~ **35.00**/each

**NFPA 92, Standard for Smoke Control Systems, 2012 edition. \$40.50/each**

~~NFPA 92B, Standard for Smoke Management Systems in Malls, Atria, and Large Spaces, 2005 edition. \$38.00/each~~

NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, ~~2004~~ **2011** edition. \$~~34.50~~ **40.50**/each

NFPA 99, Standard for Health Care Facilities, ~~2005~~ **2012** edition. \$~~54.00~~ **64.00**/each

NFPA 101A, Guide on Alternative Approaches to Life Safety, ~~2004~~ **2010** edition. \$~~38.00~~ **44.50**/each

NFPA 105, Standard for the Installation of Smoke Door Assemblies, ~~2003~~ **2010** edition.  
~~\$29.00~~ **35.00**/each

NFPA 110, Standard for Emergency and Standby Power Systems, ~~2005~~ **2010** edition. \$~~34.50~~ **39.00**/each

NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems, ~~2005~~ **2010** edition. \$~~29.00~~ **40.50**/each

NFPA 160, Standard for the Use of Flame Effects Before an Audience, ~~2006~~ **2011** edition.  
~~\$34.50~~ **40.50**/each

**NFPA 170, Standard for Fire Safety and Emergency Symbols, 2009 edition. \$44.50/each**

**NFPA 204, Standard for Smoke and Heat Venting, 2012 edition. \$44.50/each**

NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances, ~~2003~~ **2010** edition. \$~~38.00~~ **44.50**/each

NFPA 220, Standard on Types of Building Construction, ~~2006~~ **2012** edition. \$~~29.00~~ **35.00**/each

NFPA 221, Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls, 2006 **2010** edition. ~~\$34.50~~ **40.50**/each

NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations, 2004 **2009** edition. ~~\$34.50~~ **40.50**/each

NFPA 251, Standard Methods of Tests of Fire Resistance of Building Construction and Materials, 2006 edition. ~~\$34.50~~ **40.50**/each

NFPA 252, Standard Methods of Fire Tests of Door Assemblies, 2003 **2008** edition. ~~\$29.00~~ **35.00**/each

NFPA 253, Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source, 2006 **2011** edition. ~~\$29.00~~ **35.00**/each

~~NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials, 2006 edition. —\$29.00/each~~

~~NFPA 256, Standard Methods of Fire Tests of Roof Coverings, 2003 edition. —\$29.00/each~~

NFPA 257, Standard on Fire Test for Window and Glass Block Assemblies, 2000 **2007** edition. ~~\$29.00~~ **35.00**/each

NFPA 259, Standard Test Method for Potential Heat of Building Materials, 2003 **2008** edition. ~~\$29.00~~ **35.00**/each

NFPA 260, Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture, 2003 **2009** edition. ~~\$29.00~~ **35.00**/each

NFPA 261, Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes, 2003 **2009** edition. ~~\$29.00~~ **35.00**/each

NFPA 265, Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings on Full Height Panels and Walls, 2002 **2011** edition. ~~\$34.50~~ **40.50**/each

**NFPA 271, Standard Method of Test for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter, 2009 edition. \$40.50/each**

NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, 2006 **2011** edition. ~~\$34.50~~ **40.50**/each

NFPA 288, Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance-Rated Floor Systems, 2004 **2007** edition. ~~\$29.00~~ **35.00**/each

**NFPA 289, Standard Method of Fire Test for Individual Fuel Packages, 2009 edition. \$35.00/each**

NFPA 415, Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways, 2002 **2008** edition. ~~\$29.00~~ **35.00**/each

NFPA 418, Standard for Heliports, 2004 **2011** edition. ~~\$29.00~~ **35.00**/each

~~NFPA 430, Code for the Storage of Liquid and Solid Oxidizers, 2004 edition. —\$34.50/each~~

~~NFPA 432, Code for the Storage of Organic Peroxide Formulations, 2002 edition. —\$34.50/each~~

~~NFPA 434, Code for the Storage of Pesticides, 2002 edition. —\$29.00/each~~

NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2004 **2010** edition. ~~\$29.00~~ **35.00**/each

NFPA 703, Standard for Fire Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials, 2006 **2012** edition. ~~\$29.00~~ **35.00**/each

**NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment, 2012 edition. \$44.50/each**

NFPA 750, Standard on Water Mist Fire Protection Systems, ~~2003~~ **2010** edition. \$~~38.00~~  
**44.50**/each

NFPA 914, Code for Fire Protection of Historic Structures, ~~2004~~ **2010** edition. \$~~54.00~~  
**64.00**/each

NFPA 1124, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, 2006 edition. \$~~38.00~~ **44.50**/each

NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, ~~2006~~ **2011** edition. \$~~29.00~~ **35.00**/each

NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems, ~~2004~~ **2012** edition. \$~~44.00~~  
**52.50**/each

~~NFPA 5000, Building Construction and Safety Code, 2006 edition. References to this code mean the Michigan building code, R-408.30401 to 408.30547, promulgated by the Michigan department of energy, labor and economic growth, bureau of construction codes.~~

## 2.3 Other Publications.

### 2.3.1 ACI Publication. [www.concrete.org](http://www.concrete.org)

American Concrete Institute, P.O. Box 9094, Farmington Hills, MI 48333.

ACI 216.1/TMS 0216.1, Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies, ~~1997~~ **2008**. \$~~70.50~~ **54.50**/each

### 2.3.2 ANSI Publications.

American National Standards Institute, Inc., 25 West 43rd Street, ~~14th~~ **4<sup>th</sup>** floor, New York, NY 10036.

ANSI A14.3, Safety Requirements for Fixed Ladders, ~~2002~~ **1992**. [www.staging.techstreet.com](http://www.staging.techstreet.com)  
\$~~219.00~~ **250.00**/each

ICC/ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities, ~~2003~~ **2009**. [www.iccsafe.org](http://www.iccsafe.org) [www.staging.techstreet.com](http://www.staging.techstreet.com) \$~~35.00~~ **63.95**/each

**ANSI/BHMA A156.3, Exit Devices, 2008.** [www.staging.techstreet.com](http://www.staging.techstreet.com) \$**36.00**/each

BHMA/ANSI A156.19, American National Standard for Power Assist and Low Energy Power Operated Doors, ~~2002~~ **2007**. ~~[www.buildershardware.com](http://www.buildershardware.com)~~ [www.staging.techstreet.com](http://www.staging.techstreet.com) \$~~40.00~~  
**36.00**/each

**2.3.3 ASCE Publications. American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400. [www.asce.org](http://www.asce.org)**

**ASCE/SFPE 29, Standard Calculation Methods for Structural Fire Protection, 2008. \$69.00/each**

2.3.4 ASME Publications. [www.asme.org](http://www.asme.org) American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.

**2.3.5 ASSE Publications. American Society of Safety Engineers, 1800 East Oakton Street, Des Plaines, IL 60018. [www.asse.org](http://www.asse.org)**

**ANSI/ASSE A1264.1, Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems, 2007. \$69.00/each**

~~2.3.5~~ **2.3.6 ASTM Publications. [www.astm.org](http://www.astm.org) American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.**

**ASTM C 1629/C 1629M, Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Pan Products and Fiber-Reinforced Cement Panels, 2006 \$49.20/each**

ASTM D 1929, Standard Test Method for Determining Ignition Temperatures of Plastic, ~~2001~~  
(**2001e1**). ~~\$36.00~~ **49.20**/each

ASTM D 2859, Standard Test Method for Ignition Characteristics of Finished Textile Floor  
Covering Materials, ~~2004~~ **2006**. ~~\$37.20~~ **43.20**/each

ASTM D 2898, Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated  
Wood for Fire Testing, ~~1994 (1999)~~ **2010**. ~~\$37.20~~ **36.00**/each

**ASTM E 84, Standard Test Method for Surface Burning Characteristics of Building  
Materials, 2010. \$70.80/each**

**ASTM E 108, Standard Test Methods for Fire Tests of Roof Coverings, 2010a.  
\$56.40/each**

**ASTM E 119, Standard Test Methods for Fire Tests of Building Construction and  
Materials, 2010b. \$70.80/each**

ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at  
750°C, ~~2004~~ **2009b**. ~~\$36.00~~ **56.40**/each

**ASTM E 648, Standard Test Method for Critical Radiant Flux of Floor Covering Systems  
Using a Radiant Heat Energy Source, 2010. \$56.40/each**

ASTM E 814, Standard Test Method for Fire Tests of Through Penetration Fire Stops, ~~2002~~  
**2010**. ~~\$43.20~~ **56.40**/each

**ASTM E 1352, Standard Test Method for Cigarette Ignition Resistance of Mock-Up  
Upholstered Furniture Assemblies, 2008a. \$47.00/each**

**ASTM E 1353, Standard Test Methods for Cigarette Ignition Resistance of Components of  
Upholstered Furniture 2008a(e1). \$47.00/each**

**ASTM E 1354, Standard Test Method for Heat and Visible Smoke Release Rates for  
Materials and Products Using an Oxygen Consumption Calorimeter, 2009. \$56.40/each**

**ASTM E 1537, Standard Test Method for Fire Testing of Upholstered Furniture, 2007.  
\$70.80/each**

**ASTM E 1590, Standard Test Method for Fire Testing of Mattresses, 2007. \$70.80/each**

**ASTM E 1591, Standard Guide for Obtaining Data for Deterministic Fire Models, 2007.  
\$47.00/each**

ASTM E 1966, Standard Test Method for Fire-Resistive Joint Systems, ~~2004~~ **2007**. ~~\$50.40~~  
**47.00/each**

**ASTM E 2072, Standard Specification for Photoluminescent (Phosphorescent) Safety  
Markings, 2010. \$36.00/each**

ASTM E 2074, Standard Test Method for Fire Tests of Door Assemblies, Including Positive  
Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies, ~~2000e1~~ **2000, revised**  
**2004. \$50.40 56.40/each**

**ASTM E 2307, Standard Test Method for Determining Fire Resistance of Perimeter Fire  
Barrier Systems Using Intermediate-Scale, Multi-Story Test Apparatus, 2010.  
\$47.00/each**

**ASTM E 2404, Standard Practice for Specimen Preparation and Mounting of Textile,  
Paper, or Vinyl Wall or Ceiling Coverings to Assess Surface Burning Characteristics, 2008.  
\$43.20/each**

**ASTM E 2573, Standard Practice for Specimen Preparation and Mounting of Site-  
Fabricated Stretch Systems to Assess Surface Burning Characteristics, 2007a.  
\$43.20/each**

**ASTM E 2599, Standard Practice for Specimen Preparation and Mounting of Reflective Insulation Materials and Radiant Barrier Materials for Building Applications to Assess Surface Burning Characteristics, 2009. \$43.20/each**

**ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-Shaped Airflow Stabilizer, at 750 Degrees C, 2009a. \$56.40/each**

**ASTM F 851, Standard Test Method for Self-Rising Seat Mechanisms, 1987 (2005). \$36.00/each**

**ASTM F 1577, Standard Test Methods for Detention Locks for Swinging Doors, 2005. \$70.80/each**

**ASTM G 155, Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials, 2005a. \$47.00/each**

~~2.3.6~~ **2.3.7 FMGR Publication.**

FM Global Research, FM Global, 1301 Atwood Avenue, P.O. Box 7500, Johnston, RI 02919.

~~FM 4880, Approval Standard for Class I Insulated Wall or Wall and Roof/Ceiling Panels; Plastic Interior Finish Materials; Plastic Exterior Building Panels; Wall/Ceiling Coating Systems; Interior or Exterior Finish Systems, 1994. Free PDF download online at [www.fmglobal.com](http://www.fmglobal.com)~~

**ANSI/FM 4880, American National Standard for Evaluating Insulated Wall or Wall and Roof/Ceiling Assemblies, Plastic Interior Finish Materials, Plastic Exterior Building Panels, Wall/Ceiling Coating Systems, Interior or Exterior Finish Systems, 2007. Free**

**FM Approval Standard 6921, Containers for Combustible Waste, 2004. Free**

**UL 300, Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment, 2005. \$502.00/each at [www.comm-200.com](http://www.comm-200.com)**

**2.3.8 NEMA Publications. National Electrical Manufacturers Association, 1300 North 17<sup>th</sup> Street, Ste 1847, Rosslyn, VA 22209. [www.nema.org](http://www.nema.org)**

**NEMA Sb 30, Fire Service Annunciator and Interface, 2005. \$69.00/each**

~~2.3.7~~ **2.3.9 UL Publications. [www.UL.com](http://www.UL.com); purchase UL standards at [www.comm-200.com](http://www.comm-200.com) per UL website. (All revisions included in purchase of standard)**

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062.

**ANSI/UL 9, Standard for Fire Tests of Window Assemblies, 2009. \$631.00/each**

**ANSI/UL 10B, Standard for Fire Tests of Door Assemblies, 2008, revised 2009. \$631.00/each**

**ANSI/UL 10C, Standard for Positive Pressure Fire Tests of Door Assemblies, 2009. \$631.00/each**

**ANSI/UL 263, Standard for Fire Tests of Building Construction and Materials, 2007. \$631.00/each**

**ANSI/UL 294, Standard for Access Control System Units, 1999, revised 2010. \$502.00/each**

**UL 300A, Extinguishing System Units for Residential Range Top Cooking Surfaces, 2006. \$275.00/each**

**ANSI/UL 305, Standard for Safety Panic Hardware, 1997. \$502.00/each**

~~ANSI/UL 555, Standard for Fire Dampers, 1999, Revised 2002 2006, Revised 2010. \$974.00 per hard copy/\$779.00 per PDF copy~~ **\$998.00/each**

~~ANSI/UL 555S, Standard for Smoke Dampers, 1999, Revised 2003 2010. \$248.00~~ **502.00/each**

**ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Building Materials, 2009, revised 2010. \$631.00/each**

**ANSI/UL 790, Test Methods for Fire Tests of Roof Coverings, 2004, revised 2008. \$502.00/each**

**ANSI/UL 924, Standard for Emergency Lighting and Power Equipment, 1995, Revised 2001 2006, Revised 2009. ~~\$974.00 per hard copy/\$779.00 per PDF copy~~ \$998.00/each**

**ANSI/UL 1040, Standard for Fire Test of Insulated Wall Construction, 1996, revised 2007. ~~\$490.00 per hard copy / \$392.00 PDF~~ \$502.00/each**

**ANSI/UL 1315, Standard for Safety for Metal Waste Paper Containers, 2007. \$502.00/each**

**ANSI/UL 1479, Standard for Fire Tests of Through-Penetration Firestops, 2003, revised 2010. \$502.00/each**

**ANSI/UL 1715, Standard for Fire Test of Interior Finish Material, 1997, revised 2008. ~~\$875.00 per hard copy / \$699.00 per PDF copy~~ \$897.00/each**

**ANSI/UL 1784, Standard for Air Leakage Tests for Door Assemblies, 2001, revised 2009. \$502.00/each**

**ANSI/UL 1975, Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes, 1996 2006. ~~\$974.00 per hard copy/\$779.00 per PDF copy~~ \$998.00/each**

**ANSI/UL 1994, Standard for Luminous Egress Path Marking Systems, 2004, revised 2010. \$998.00/each**

**ANSI/UL 2079, Standard for Tests for Fire Resistance of Building Joint Systems, 2004, revised 2008. \$502.00/each**

~~2.3.8~~ **2.3.10 U.S. Government Publication. [www.gpoaccess.gov/CFR](http://www.gpoaccess.gov/CFR)**

U.S. Government Printing Office, Washington, DC 20402.

**Title 16, Code of Federal Regulations, Part 1500 and Part 1507. Free**

Title 16, Code of Federal Regulations, Part 1632, "Standard for the Flammability of Mattresses and Mattress Pads (FF-4-72)." ~~\$63.00/each~~ **Free**

~~2.3.9~~ **2.3.11 Other Publication.**

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003. [www.merriam-webster.com](http://www.merriam-webster.com) ~~\$26.95~~ **27.95/each**

2.4 References for Extracts in Mandatory Sections.

NFPA 1, Uniform Fire Code™, 2006 **2012** edition. ~~\$72.00~~ **85.50/each**

NFPA 72®, National Fire Alarm Code®, 2002 **2010** edition. ~~\$54.00~~ **85.50/each**

NFPA 80, Standard for Fire Doors and Fire Windows, 1999 **2010** edition. ~~\$38.00~~ **40.50/each**

NFPA 88A, Standard for Parking Structures, 2002 **2011** edition. ~~\$29.00~~ **35.00/each**

~~NFPA 101B, Code for Means of Egress for Buildings and Structures, 2002 edition. \$44.00/each~~

~~NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures, 1995 edition. \$29.00/each~~

NFPA 288, Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance-Rated Floor Systems, 2004 **2009** edition. ~~\$29.00~~ **35.00/each**

NFPA 301, Code for Safety to Life from Fire on Merchant Vessels, 2004 **2008** edition. ~~\$38.00~~ **44.50/each**

NFPA 415, Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways, 2002 **2008** edition. ~~\$29.00~~ **35.00/each**



NFPA 914, Code for Fire Protection of Historic Structures, ~~2004~~ **2010** edition. \$~~54.00~~ **64.00**/each

NFPA 921, Guide for Fire and Explosion Investigations, ~~2004~~ **2011** edition. \$~~72.00~~ **85.50**/each

**ASCE/SEI 7, Minimum Design Loads for Buildings and Other Structures, 2010.**

**www.asce.org \$165.00**

(4) Rules promulgated by the Michigan department of ~~environmental quality~~ **licensing and regulatory affairs, bureau of fire services**, are available for inspection from the Michigan government website, [www.michigan.gov/orr](http://www.michigan.gov/orr) and linking to "~~MI Admin. Code Michigan administrative code~~" and also available from the Michigan department of ~~environmental quality~~ **licensing and regulatory affairs, bureau of fire services**, by calling ~~(517) 335-7211~~ **(517) 241-8847**.

(5) Rules pertaining to the Michigan elevator code, Michigan mechanical code, the Michigan building code, Michigan electrical code, and Michigan plumbing code are available for inspection at the ~~Okemos~~ office of the Michigan department of ~~energy, labor & economic growth~~ **licensing and regulatory affairs, bureau of construction codes**. Copies of these rules are available from the Michigan government website, [www.michigan.gov/orr](http://www.michigan.gov/orr) and linking to "~~MI Admin. Code Michigan administrative code~~" or by contacting the Michigan Department of ~~Energy, Labor & Economic Growth~~ **licensing and regulatory affairs, Bureau of Construction Codes**, 2501 Woodlake Circle, Okemos, Michigan 48864.

#### R 29.1803 Definitions.

Rule 3. As used in these rules:

(a) "Act" means 1941 PA 207, MCL 29.1 to 29.33.

(b) "Authority having jurisdiction" means the director of the Michigan department of ~~energy, labor and economic growth~~ **licensing and regulatory affairs**, an employee of the department of ~~energy, labor and economic growth~~ **licensing and regulatory affairs** appointed by the director to implement the act, or an employee of a city, village, or township delegated to enforce the code under the provisions of section 2b of the act.

(c) "Code" means national fire protection association standard no. 101, ~~2006~~ **2012** edition, entitled "life safety code."

(d) "Cosmetic remodeling" means surface changes made solely to the wall, floor, or ceiling, that do not decrease the fire rating of the wall, floor, or ceiling, including the replacement of windows and doors.

(e) "County medical care facility" means a nursing care facility, other than a hospital long-term care unit, which provides organized nursing care and medical treatment to 7 or more unrelated individuals who are suffering or recovering from illness, injury, or infirmity and which is owned by a county or counties. For the purpose of these rules, a county medical care facility ~~shall be~~ **is** considered a nursing home.

(f) "Existing facility" means a facility that is licensed as a health care or mental health care facility under the provisions of 1978 PA 368, MCL 333.1001 to 333.25211, and 1974 PA 258, MCL 330.1001 to 330.2106, on the date these rules become effective.

(g) "Freestanding surgical outpatient facility" means a facility, other than the office of a physician, dentist, podiatrist, or other private practice office, as defined by 1978 PA 368, MCL 333.20104, that offers a surgical procedure and related care which, in the opinion of the attending physician, can be safely performed without requiring overnight inpatient hospital care.

The term does not include a surgical outpatient facility owned by, and operated as part of, a hospital.

(h) "Freestanding surgical outpatient facility, type I facility" means a freestanding surgical outpatient facility that does not use anesthetics or medications which render a person incapable of taking action in an emergency within 2 minutes of being notified of an emergency.

(i) "Freestanding surgical outpatient facility, type II facility" means a freestanding surgical outpatient facility that uses anesthetics or medications which render a person incapable of taking action in an emergency within 2 minutes of being notified of an emergency.

(j) "Health care facility" means a facility as defined in section 20106 of 1978 PA 368, MCL 333.20106 of the Michigan Compiled Laws, and includes the facilities defined in subdivisions (e), (g), (h), (i), (j), (k), (l), (m), (n), (o), (q), (r), (s), (t), (u) and (w) of this rule.

(k) "Home for the aged" means a supervised personal care facility, other than a hotel, adult foster care facility, hospital, nursing home, or county medical care facility, as defined by 1978 PA 368, MCL 333.20106, that provides room, board, and supervised personal care to 21 or more unrelated, nontransient individuals 60 years of age or older. "Home for the aged" includes a supervised personal care facility for 20 or fewer individuals who are 60 years of age or older if the facility is operated in conjunction with, and as a distinct part of, a licensed nursing home.

(l) "Hospital" means a facility that offers inpatient, overnight care and services for observation, diagnosis, and active treatment of an individual who has a medical, surgical, obstetric, chronic, or rehabilitative condition that requires the daily direction or supervision of a physician, as defined by 1978 PA 368, MCL 333.20106. The term does not include a mental health hospital or a state-owned correctional facility.

(m) "Hospital long-term unit" means a nursing care facility, owned and operated by and as part of a hospital, providing organized nursing care and medical treatment to 7 or more unrelated individuals suffering or recovering from illness, injury, or infirmity.

(n) "Hospice" means a health care program that provides a coordinated set of services rendered at home or in outpatient or institutional setting for individuals suffering from a disease or condition with a terminal prognosis.

(o) "Hospice residence" is a facility that provides 24-hour hospice care to 2 or more patients at a single location.

(p) "Limited care facility" means a home for the aged.

(q) "Mental hospital," or "psychiatric hospital," means a freestanding establishment as defined by 1974 PA 248, MCL 330.1100b, that offers coordinated psychiatric services for the observation, diagnosis, active treatment, and overnight care of persons who have a mental illness, a chronic mental condition, or serious emotional disturbance that requires the daily direction or supervision of physicians who are licensed to practice in the state.

(r) "Mobile" means capable of removing or protecting oneself from danger by one's own efforts.

(s) "Mobile and transportable health care structures" mean trailers and motor homes. Mobile and transportable health care structures shall comply with part 6 of these rules.

(t) "Modular units" means prefabricated units that are placed on piers or foundations. Modular units shall comply with the requirements of part 3 and part 4 of these rules.

(u) "Psychiatric unit" means a coordinate psychiatric inpatient program of a hospital as defined in MCL 29.1803(1) that provides services for the observation, diagnosis, active treatment, and overnight care of individuals with serious mental illness, chronic mental condition, or serious emotional disturbance that require the daily direction or supervision of physicians who are licensed to practice in the state.

(v) "Non-mobile" means not capable of removing or protecting oneself from danger by one's own efforts due to physical or mental limitations.

(w) "Nursing home" means a nursing care facility, including a county medical care facility that provides organized nursing care and medical treatment to 7 or more unrelated individuals who are suffering or recovering from illness, injury, or infirmity as defined by 1978 PA 368, MCL 333.1101 to 333.25211. Nursing home does not include a unit in a state correctional facility, a hospital, a hospice residence, or veterans' facility created under 1885 PA 152, MCL 36.1 to 36.12.

(x) "Remodeling" means an alteration or change of fire-rated assembly, or the installation of new equipment required by these rules.

(y) "Typical smoke zone" means the average size smoke zone within the facility.

#### R 29.1808 Universal amendments.

Rule 8. Sections 4.6.10.1, 8.7.3.1, 9.4.2.1, and 9.4.2.2 of the code adopted by reference in R 29.1802 of these rules are amended, section 9.6.6.1 is added, and sections 9.1.2, 9.4.3.1, and 9.4.3.2 are deleted, as follows:

4.6.10.1. A person may occupy a building or portion of a building during construction, repair, alterations, renovations, modification, reconstruction or additions only if all means of egress and all fire protection features in the building and on-site are in place and continuously maintained for the part occupied and if the occupied portion is separated from the part under construction by a wall that has a 1-hour-fire-resistance rating. The temporary 1-hour-rated wall that is used for this separation may be constructed of combustible material. Instead of having all means of egress and fire protection features in place, the health care facility may take other measures that would provide equivalent safety if approved by the bureau of fire services. A health care facility or part of a health care facility shall not be occupied, in whole or in part, without approval from the bureau of fire services and the ~~consumer department of community health~~, **bureau of health systems care services**.

8.7.3.1. The health care facility shall store and handle flammable and combustible liquids in compliance with R 29.5101 to **R 29.5516** promulgated by the Michigan department of ~~environmental quality~~ **licensing and regulatory affairs, bureau of fire services** under the provisions of the act.

9.1.2. Deleted.

9.4.2.1. The health care facility shall ensure that new elevators, escalators, dumbwaiters, and moving walks are installed in compliance with the Michigan elevator rules, ~~R 408.8101~~ **R 408.7001 to R 408.7103**, of the Michigan Administrative Code, promulgated by the Michigan department of ~~energy, labor & economic growth~~ **licensing and regulatory affairs**, bureau of construction codes.

9.4.2.2. The health care facility shall ensure that existing elevators, escalators, dumbwaiters, and moving walks are in compliance with the Michigan elevator rules, ~~R 408.8101 of the Michigan Administrative Code~~, **R 408.7001 to R 408.7103**, promulgated by the Michigan ~~energy, labor & economic growth~~ **licensing and regulatory affairs**, bureau of construction codes.

9.4.3.1. Deleted.

9.4.3.2. Deleted.

9.6.6.1. Elevator capture and control - elevator controls shall not be connected to the fire alarm system.

## PART 2. FREESTANDING SURGICAL OUTPATIENT FACILITIES

R 29.1821 Life safety code; existing type I freestanding surgical outpatient facilities; adoption by reference.

Rule 21. The provisions of chapters 1 to ~~40~~ **11**, 21, 39, and 43 of the code that apply to existing business occupancies are adopted by reference, and are available for review as specified in R 29.1802, and apply to type I freestanding surgical outpatient facilities.

R 29.1822 Life safety code; existing type II freestanding surgical outpatient facilities; adoption by reference.

Rule 22. The provisions of chapters 1 to ~~40~~ **11**, 21, 39, and 43 of the code that apply to existing ambulatory health care centers and existing business occupancies are adopted by reference in R 29.1802 and apply to existing type II freestanding surgical outpatient facilities.

R 29.1823 Life safety code; new type I freestanding surgical outpatient facilities; adoption by reference; amendments.

Rule 23. (1) The provisions of chapters 1 to ~~40~~ **11**, 20, and 38 of the code that apply to new business occupancies apply to new type I freestanding surgical outpatient facilities and, except for the amendments to the provisions specified in these rules, are adopted by reference in R 29.1802.

(2) Section 38.1.1.1 of the code is amended to read as follows:

**38.1.1.1 The requirements of this chapter shall apply to new buildings or portions thereof used as business occupancies.** National fire protection association standard no. 101A entitled "Guide on Alternative Approaches to Life Safety," as adopted in R 29.1801 of these rules, does not apply to the design of new freestanding surgical outpatient facilities construction.

R 29.1824 Life safety code; new type II freestanding surgical outpatient facilities; adoption by reference.

Rule 24. (1) The provisions of chapters 1 to ~~40~~ **11**, 20, ~~and 38, and 43~~ of the code that apply to new ambulatory health care centers and new business occupancies apply to new type II freestanding surgical outpatient facilities and, except for the amendments to the provisions specified in these rules, are adopted by reference in R 29.1801. ~~of these rules.~~

## PART 3. HOSPITALS; MENTAL HOSPITALS

R 29.1832 Life safety code; new hospitals, mental hospitals, psychiatric hospitals, and psychiatric units; adoption by reference; amendment.

Rule 32. (1) The provisions of chapters 1 to 10, 11, 18, and 43 of the code that apply to new hospitals, new mental hospitals, new psychiatric hospitals, and new psychiatric units are adopted by reference in R 29.1802, ~~except as amended by these rules.~~

(2) **Section 18.3.6.3.9.2 of the code is deleted** and Section 18.4.3.7.2.1 of the code is amended to read as follows:

**18.3.6.3.9.2 Deleted**

18.4.3.7.2.1 Where the smoke compartment being modified is not protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~19.3.5.6~~ **19.3.5.7**, all of the following shall apply:

- (1) Doors protecting corridor openings shall be constructed of 1-3/4 in. (44 mm) thick, solid-bonded core wood or of construction that resists the passage of fire for ~~not less than a minimum~~ **of 20 minutes**.
- (2) Door frames shall be labeled or of steel construction.
- (3) Deleted.

#### PART 4. NURSING HOMES

R 29.1841 Life safety code; existing nursing homes; amendment; adoption by reference.

Rule 41. Existing nursing homes shall comply with the provisions of chapters 1 to 10, 11, 19, and 43 of the code, which are adopted by reference in R 29.1802, ~~except for the amendments in these rules~~. Section 19.3.5.1 of the code is amended to read as follows:

19.3.5.1. Buildings containing nursing homes shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7, unless otherwise permitted by 19.3.5.4. The facility owner or designated representative shall comply with this requirement ~~within 10 years of the effective date of these rules~~ **by July 28, 2019**.

R 29.1842 Life safety code; new nursing homes; adoption by reference.

Rule 42. (1) The provisions of chapters 1 to 10, 11, 18, and 43 of the code that apply to new nursing home occupancies, ~~except as amended by these rules~~, are adopted by reference in R 19.1802.

**(2) Section 18.4.3.7.2.1 is amended to read as follows:**

**18.4.3.7.2.1 Where the smoke compartment being modified is not protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.7, all of the following shall apply:**

- (1) Doors protecting corridor openings shall be constructed of 1-3/4 in. (44 mm) thick, solid-bonded core wood or of construction that resists the passage of fire for a minimum of 20 minutes.**
- (2) Door frames shall be labeled or of steel construction.**
- (3) Deleted.**

#### PART 5. HOMES FOR THE AGED

R 29.1851 Life safety code; existing homes for the aged; adoption by reference; amendments.

Rule 51. Existing homes for the aged shall comply with the provisions of chapters 1 to 10, 11, 19, and 43 of the code that apply to existing health care occupancies, which are adopted by reference in R 29.1802, except for the provisions of the chapters amended by these rules.

Section 19.3.7.4 is amended, and sections 19.3.5.5 and 19.3.6.1.1 are added to the code, to read as follows:

19.3.5.5. Existing home for the aged facilities shall only house mobile residents unless the smoke compartments that house non-mobile residents are protected throughout by an automatic extinguishing system that is in compliance with section 19.3.5.3 of the code.

19.3.6.1.1 To provide for the physical needs of residents, seating locations within corridors shall be limited in number and only allowed where essential, such as waiting areas at elevators or outside transportation, and shall meet the following criteria:

(a) Seating shall not impede on the required width of the corridor and shall be limited to seating which will accommodate up to 2 persons per location.

(b) Seating arrangements shall be of metal or wood construction or upholstered furniture complying with ~~one~~ 1 of the following provisions:

(i) The furniture shall meet the criteria specified in 10.3.2.1 and 10.3.3.

(ii) The furniture shall be in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1 (1).

(c) Pads or cushions used on metal or wood construction or furniture shall meet the requirements of paragraph (i) of subdivision (b) of this rule, or NFPA 701.

~~19.3.7.4~~ **19.3.7.3** Any required smoke barrier shall be constructed in accordance with section 8.5 and shall have a fire resistance of not less than ½ hour, unless otherwise permitted by the following:

(a) This requirement shall not apply where an atrium is used, and both of the following criteria also shall apply:

(i) Smoke barriers shall be permitted to terminate at an atrium wall constructed in accordance with 8.6.7(1)(c).

(ii) Not less than two separate smoke compartments shall be provided on each floor.

(b) The smoke dampers specified in the provisions of section 8.5.5.2 of the code are not required.

## PART 6. MOBILE AND TRANSPORTABLE UNIT HEALTH CARE STRUCTURES

R 29.1861 Requirements for new and existing mobile and transportable unit health care structures.

Rule 61. (1) This section applies to new and existing mobile and transportable unit health care structures.

(2) New and existing mobile and transportable unit health care structures shall be in compliance with all of the following provisions:

(a) If a dock seal-type connector is utilized between the mobile or transportable unit and the health care facility, then the dock seal manufacturer's specifications shall be submitted to the authority having jurisdiction for review and approval. The maximum length of a dock seal connector is 10 feet (3 meters).

(b) If conventional building construction is used for the connecting link between the unit and the health care facility, compliance, as applicable, with section 18.1.6.4 or 19.1.6.4 of the code is required.

(c) A unit shall be located not less than 10 feet (3 meters) from any unprotected building opening. Building openings include doors, windows, and louvers. A unit shall be located not less than 20 feet (6.1 meters) from a patient sleeping room window unless permitted by the department of community health bureau of health systems.

(d) The unit shall be protected throughout by an approved fire suppression system that is installed, tested, and maintained in accordance with the manufacturer's requirements, applicable national fire protection association standards, and is in compliance with the act.

Exception: Existing units that do not have a fire suppression system may continue in use. Any major renovation to an existing unit shall require compliance with subsection (d) of this rule. Major renovation includes replacement of diagnostic or treatment equipment or changes to the interior of the unit that affects more than 50% of the square footage area of the unit.

(e) At least one portable fire extinguisher that is installed, tested, and maintained in accordance with the national fire protection association standard no. 10, ~~2002~~ **2010** edition, entitled "Standard for Portable Fire Extinguishers," as adopted in chapter 2 of the life safety code, adopted in R 29.1802, shall be provided in the control room or other staffed location within the unit.

(f) The administration of the health care facility shall provide a written plan and training to staff assigned to work in the unit that includes evacuation of patients, securing and separating the unit from the health care facility in the case of a fire or other emergency, and notification of appropriate emergency personnel. The written plan and documentation of training shall be made available to the authority having jurisdiction upon request.

(g) If the mobile or transportable unit is shared with other health care facilities, a fire pull station shall be installed in the docking area of each of the shared health care facilities. The pull station shall initiate the health care facility fire alarm system.

(h) If an overhead door is used for patient access between the unit and the building, then a side-hinged, swinging-type door that is a minimum 41.5 inches (105 centimeters) in clear width shall be provided on the unit.

Exception no. 1: If patients are transported onto the unit on a stretcher that is 28 inches (71.1 centimeters) or less in width, then a side-hinged door that is a minimum of 32 inches (81 centimeters) in clear width shall be permitted.

Exception no. 2: Existing swinging door installations that are less than 41.5 inches (105 centimeters) in clear width may continue to be used subject to the approval of the authority having jurisdiction.

(i) Interior finish materials shall be a minimum class C as defined in section ~~6-5~~ **10.2** of the code.

## PART 7. HOSPICE ~~FACILITIES~~ **RESIDENCES**

R 29.1871. Code; new and existing hospice ~~facilities~~ **residences**; adoption by reference; amendment.

Rule 71. (1) The provisions of chapters 1 to 10, 11, 18, and 43 of the code that apply to new hospice occupancies, except as amended by these rules, are adopted by reference in R 29.1801.

(2) The provisions of chapters 1 to 10, 11, 19, and 43 of the code that apply to existing hospice occupancies, except as amended by these rules, are adopted by reference in R 29.1801.

Sections 18.4.3.7.2.1 of the code is amended to read as follows:

18.4.3.7.2.1 Where the smoke compartment being modified is not protected throughout by an approved, supervised automatic sprinkler system in accordance with ~~19.3.5.6~~ **19.3.5.7**, **all of** the following shall apply:

(a) Doors protecting corridor openings shall be constructed of 1-3/4 in. (44 mm) thick, solid-bonded core wood or of construction that resists the passage of fire for ~~not less than~~ **a minimum of 20 minutes**.

(b) Door frames shall be labeled or of steel construction.

(c) Deleted.